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United States Environmental Protection Agency  
Washington, DC 20460

ORIGINAL

Document Description

SAT P-02-21

Date

11/27/01

TOXIC SUBSTANCES CONTROL ACT  
CONFIDENTIAL BUSINESS INFORMATION

Does not contain National Security Information (E.O. 12065)

## STRUCTURE ACTIVITY TEAM REPORT ver. 04/98

Case #: P-02-0021

DCN:

SAT Date: 10/19/01

SAT Chair: V. Nabholz

Submitter:

Chemical Name:

CAS RN:

None

Trade Name:

Structure

Molecular Formula:

Molecular Wt.

WT%&lt;500:

WT%&lt;1000:

MP: 60.00 - 80.00

BP:

&gt;500

Eq. Wt:

H<sub>2</sub>O Sol (g/L):

&lt;0.001

V.P.

&lt;0.0000001

Max. Prod. Volume (kg/yr):

Physical State:

Solid

USE:

Related Case Numbers

Case Role

Related Case Numbers

Case Role

Focus

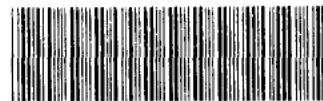
Date: OCT 25 2001

Results:

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50020000723

## STRUCTURE ACTIVITY TEAM REPORT

ver. 04/98

Case #: P-02-0022

DCN:

SAT Date: 10/19/01

SAT Chair: V. Nabholz

Submitter:

Chemical Name:

CAS RN:

None

Trade Name:

Structure

Molecular Formula:

Molecular Wt.

WT%&lt;500:

WT%&lt;1000:

MP:

BP:

&gt;500

Eq. Wt:

H2O Sol (g/L):

0.002

V.P.

&lt;0.000001

Max. Prod. Volume (kg/yr):

Physical State:

Liquid

USE:

Related Case Numbers

Case Role

Related Case Numbers

Case Role

Focus

Date: OCT 25 2001

Results:

## STRUCTURE ACTIVITY TEAM REPORT

ver. 04/98

?

Case #: P-02-0023

DCN:

SAT Date: 10/19/01

SAT Chair: V. Nabholz

Submitter:

Chemical Name:

CAS RN:

None

Trade Name:

Structure

Molecular Formula:

Molecular Wt.

WT%&lt;500:

WT%&lt;1000:

MP:

BP:

&gt;500

Eq. Wt:

H2O Sol (g/L):

0.0000015

V.P.

&lt;0.000001

Max. Prod. Volume (kg/yr):

Physical State:

Liquid

USE:

Related Case Numbers

Case Role

Related Case Numbers

Case Role

FOCUS

Date: OCT 25 2001

Results:

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## STRUCTURE ACTIVITY TEAM REPORT ver. 04/98

Case #: P-02-0024

DCN:

SAT Date: 10/19/01

SAT Chair: V. Nabholz

Submitter:

Chemical Name:

CAS RN:

None

Trade Name:

Structure

Molecular Formula:

Molecular Wt.:

WT%&lt;500:

WT%&lt;1000:

MP:

BP:

&gt;500

Eq. Wt:

H<sub>2</sub>O Sol (g/L):

0.002

V.P.:

&lt;0.000001

Max. Prod. Volume (kg/yr):

Physical State:

Liquid

USE:

Related Case Numbers

Case Role

Related Case Numbers

Case Role

Focus Date: OCT 25 2001

Results:

DROP

STRUCTURE ACTIVITY TEAM REPORT 19 October 2001

CASE NUMBERS: P02-0021 to 0024

RELATED CASES:

CONCLUSIONS/DISCUSSIONS

TYPE OF CONCERN: HEALTH ECOTOX

LEVEL: 1-2 2

KEYWORDS: LUNG, AQUATOX-A, IRR-E,MM

SUMMARY OF ASSESSMENT:

FATE:   
liquids (P) except P020021=solid with mp 70 C (M);  
log Kow for = 5.2 (SRC);  
S = 0.960 mg/L at 20 °C (EAB), <1.0 mg/L (ICB), but could be dispersible in water at pH 7 based on analogs (RAD);  
vp < 1.0E-6 mm Hg or torr at 25 °C (P);  
bp > 500 °C (P);  
H < 1.0E-8 (P);  
log Koc = 4.8 (P);  
log fish BCF = 0.75 (P);  
POTW removal = 80 to 90% via sorption and biodegradation;  
time for complete ultimate aerobic biodegradation = weeks to months;  
sorption to soils and sediments = very strong;  
atmospheric oxidation half-life = 6.5 d via ozone, O3;  
PBT Potential: P1B1T1  
\*CEB FATE: migration to ground water = negligible;

HEALTH: Absorption of 0021 nil thru skin and GI tract and poor thru lungs based on physical/chemical properties and analogs; absorption of 0022 to 0024, poor all routes based on physical/chemical properties and analogs;

concern for lung toxicity if inhaled due to possible surfactancy;  
concern for irritation to mucous membranes and eyes due to surfactancy;

low to moderate concern for toxicity

\*CEB HEALTH: Exposures to humans: inhalation; XB: NO testing.

ECOTOX: Predicted (P) and measured (M) toxicity values in mg/L (ppm) are:

fish 96-h LC50	=> 10.0	P TOC 2
daphnid 48-h LC50	=> 10.0	P TOC 2
green algal 96-h EC50	=> 10.0	P TOC 2
algal 72-h EC50 c	> 1000.0	M S,N WAF FLAG P020024
fish chronic value	=> 1.0	P TOC 2
daphnid ChV	=> 1.0	P TOC 2

algal ChV                   => 1.0      P TOC 2  
algal ChV c               = 0.650   M S,N WAF FLAG  
Amount and ID of material in the WAF was not identified or  
measured, therefore, no sufficient for risk assessment;

Predictions are based on SAR-nearest analog analysis for three  
analogs with toxicity values of 0.500, 7.5, and 20 mg/L for fish  
acute; SAR chemical class = aliphatic amines and amphoteric  
surfactants; [REDACTED]; pH7; effective concentrations based  
on 100% active ingredients and nominal concentrations; hardness  
<180.0 mg/L as CaCO3; and TOC <2.0 mg/L;  
moderate concern for toxicity in water with TOC<2.0 mg/L;  
mitigation of toxicity expected in the presence of 10 mg TOC/L  
but amount is unknown;  
moderate concern for environmental risk at TOC = 10 mg/L;  
assessment factor       = 10.0  
concern concentration   = 0.100  
\*CEB ECOTOX: All releases to water; XB: No testing desired.

SAT Co-chairperson: Vince Nabholz, 260-1271

BIOLOGICAL TEST INFORMATION					
Case Number:	<b>P-02-0022, P-02-0023, P-02-0024</b>	Date Received: <b>10/9/01</b>	Rev. Init: <b>ach</b>	OECD Status: <b>incomplete</b>	Page: 1 of 1
Other Data:	<input checked="" type="checkbox"/> Ecotox	<input type="checkbox"/> Fate	<input type="checkbox"/> Water solubility/Log P	%ai	

NCSAB SAT REPORT		Submitter		CBI? (Y/N):	
PMN		P-02-0021		CAS RN	
Chem.Name		None		Analog	
Structure		PV(kg)			
Formula					
MW					
Wt%<500					
Wt%<1000					
MP (M)					
MP (E)					
BP (M)					
BP (E)					
VP(E)<0.0000001					
WS g/L (E)					
WS g/L (M)					
State					
Solid					
LogP(M)					
Endpoint (mg/L)					
Est. Value					
Meas. Value					
Comm					
logP(Epi)					
logP(ClogP)					
Fish 96-h					
Daphnid 48-h					
Algal 96-h					
Fish ChV					
Daphnid ChV					
Algal ChV					
BCF					
CHEMICAL CLASS:					
SAR:					
ECOTOX CONCERN					
CONCERN CONCENTRATION					
CRSS DATE: 10/18/2001					
ASSESSOR:					

NCSAB SAT REPORT		Submitter		CBI? (Y/N):	
PMN		P-02-0022		CAS RN	
		None		Analog	
Chem.Name				PV(kg)	
Structure					
<div style="background-color: black; width: 100%; height: 100%;"></div>					
<div style="background-color: black; width: 100%; height: 100%;"></div>					
Formula		Eq Wt			
MW		Wt%<500		Wt%<1000	
MP (M)	MP (E)	BP (M)	BP (E)	VP(E) <0.000001	
WS g/L (E)	WS g/L (M)	State	Liquid	LogP(M)	
Endpoint (mg/L)	Est. Value	Meas. Value	Comments	LogP(Epi)	
Fish 96-h				LogP(ClogP)	
Daphnid 48-h					
Algal 96-h					
Fish ChV					
Daphnid ChV					
Algal ChV					
BCF					
CHEMICAL CLASS:		SAR:			
ECOTOX CONCERN	H	M	L	CONCERN CONCENTRATION	
CRSS DATE: 10/18/2001		ASSESSOR:			

NCSAB SAT REPORT		Submitter		CBI? (Y/N):	
PMN P-02-0023		CAS RN		None	
Chem.Name				Analog	
				PV(kg)	
Structure					
Formula			Eq Wt		
MW			Wt%<500		Wt%<1000
MP (M)	MP (E)	BP (M)	BP (E)	>500	VP(E) <0.000001
WS g/L (E)	0.0000015	WS g/L (M)	State	Liquid	LogP(M)
Endpoint (mg/L)	Est. Value	Meas. Value	Comments		LogP(Epi)
Fish 96-h					LogP(ClogP)
Daphnid 48-h					
Algal 96-h					
Fish ChV					
Daphnid ChV					
Algal ChV					
BCF					
CHEMICAL CLASS:			SAR:		
ECOTOX CONCERN	H	M	L	CONCERN CONCENTRATION	
CRSS DATE: 10/18/2001			ASSESSOR:		

NCSAB SAT REPORT		Submitter		CBI? (Y/N):	
PMN P-02-0024		CAS RN		None	
Chem.Name				Analog	
<div style="background-color: black; width: 100%; height: 100%;"></div>				<div style="background-color: black; width: 100%; height: 100%;"></div>	
				PV(kg)	
Structure					
<div style="background-color: black; width: 100%; height: 100%;"></div>					
<div style="background-color: black; width: 100%; height: 100%;"></div>					
Formula		Eq Wt			
MW		Wt%<500		Wt%<1000	
MP (M)	MP (E)	BP (M)	BP (E)	VP(E) <0.000001	
WS g/L (E) 0.002	WS g/L (M)	State		Liquid	LogP(M)
Endpoint (mg/L)	Est. Value	Meas. Value	Comments		LogP(Epi)
Fish 96-h					LogP(ClogP)
Daphnid 48-h					
Algal 96-h					
Fish ChV					
Daphnid ChV					
Algal ChV					
BCF					
CHEMICAL CLASS:			SAR:		
ECOTOX CONCERN	H	M	L	CONCERN CONCENTRATION	
CRSS DATE: 10/18/2001			ASSESSOR:		

ATTENDEES	SIGNATURE
<b>CHEMISTRY</b>	
<input type="checkbox"/> Paul Bickart	_____
<input type="checkbox"/> Diana Darling	_____
<input type="checkbox"/> Rich Engler	_____
<input type="checkbox"/> Greg Fritz	_____
<input type="checkbox"/> Daniel Lin	_____
<input checked="" type="checkbox"/> Kathy Schechter	<i>Kathy Schechter</i>
_____	_____
_____	_____
<b>ENVIRONMENTAL FATE</b>	
<input type="checkbox"/> Bob Boethling	_____
<input type="checkbox"/> David Lynch	_____
<input checked="" type="checkbox"/> Gary Thom	<i>gthom</i>
_____	_____
_____	_____
<b>HEALTH</b>	
<input type="checkbox"/> Katherine Anitole	_____
<input checked="" type="checkbox"/> Michael Cimino	<i>Michael C. Cimino</i>
<input checked="" type="checkbox"/> Leonard Keifer	<i>L. Keifer</i>
<input checked="" type="checkbox"/> David Lai	<i>David Lai</i>
<input checked="" type="checkbox"/> Jim Murphy	<i>MEMO</i>
<input checked="" type="checkbox"/> Deborah Norris	_____
<input checked="" type="checkbox"/> Ronald Ward	<i>MEMO</i>
<input type="checkbox"/> Yin Tak Woo	_____
_____	_____
_____	_____
_____	_____
<b>ENVIRONMENTAL EFFECTS</b>	
<input type="checkbox"/> Gordon Cash	_____
<input type="checkbox"/> Vince Nabholz	_____
<input checked="" type="checkbox"/> Maggie Wilson	<i>Maggie Wilson</i>
_____	_____
<b>SAT CHAIRPERSON/OTHER</b>	
<input type="checkbox"/> Rebecca Jones	_____
<input checked="" type="checkbox"/> Leonard Keifer	<i>Leonard Keifer</i>
<input checked="" type="checkbox"/> Vince Nabholz	_____
_____	_____
_____	_____